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BPA

Demographic and employment shifts of US veterinarians, 1980 to 1990

The Center for Information Management was commissioned by the AVMA Executive Board to conduct an analysis of the US population of veterinarians, regarding demographic, geographic, and employment variables. The purpose of the analysis was to develop a profile of the profession, including demographic and employment shifts taking place in the profession in recent years. With the establishment of this analysis as part of the Center's ongoing research programs, the veterinary medical profession will benefit from a clearer picture of past trends and be able to determine its future course with greater confidence.

Data used for analysis were obtained from the computer master file of veterinarians, which is maintained by the Division of Membership and Field Services. The file represented the best available data base of veterinarians and associated demographic information for the years 1980, 1990, and 1991. The AVMA records include all US graduates, beginning in 1980, when the association began to initiate records for all US veterinary students and track them through graduation.

The 1991 AVMA master file included 65,767 veterinarians: 52,183 AVMA members, 3,141 verified nonmembers, and 10,443 unverified nonmembers. The combined population of members and verified nonmembers was 55,324 veterinarians. Excluding 777 veterinarians in foreign countries, 4,001 retired veterinarians, and 373 disabled or inactive veterinarians, the population of active veterinarians in the United States was 50,173 veterinarians. This figure was used as the base population for 1991 tabulations. A similar breakdown of the 1980 and 1990 AVMA master files yielded populations of 32,734 and 48,666 active veterinarians, respectively.

On the basis of analysis of the 1980, 1990, and 1991 AVMA computer master files of Association members and verified nonmembers, the population of active veterinarians in the United States increased 48.7%, from 32,734 in 1980 to 48,666 in 1990, or about 4% per year compounded annually. In 1991, the total number of active veterinarians was estimated to be 50,173, up 3% from 1990.

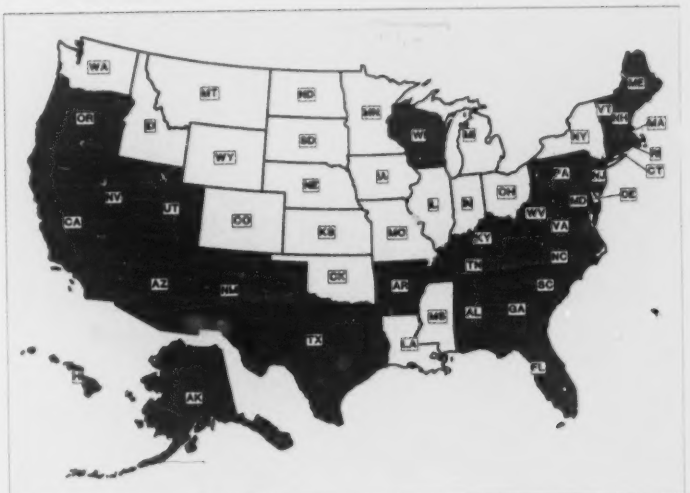

Figure 1—Percentage change of veterinarians, 1980 to 1990. □ ≤ average (48.7%); ■ > average (48.7%).

Geography

The percentage increase in veterinarians from 1980 to 1990 varied among 9 census regions of the country (Table 1). In general, growth was greater than average in the southwestern and southeastern states, and less than average in north-central and western mountain states (Fig 1). The West North Central region had the lowest growth rate (27.4%)

From the AVMA Center for Information Management; J. Karl Wise, PhD, Director; Jih-Jing Yang, PhD, Research Analyst.

Table 1—Veterinarians by state, 1980, 1990, 1991

State	1980		1990		1991		Change 1980 to 1990	
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage
Total	32,734	100.0	48,666	100.0	50,173	100.0	15,932	48.7
New England	1,333	4.1	2,319	4.8	2,398	4.8	986	74.0
Maine	146	0.4	240	0.5	247	0.5	94	64.4
New Hampshire	141	0.4	256	0.5	264	0.5	115	81.6
Vermont	119	0.4	198	0.4	208	0.4	79	66.4
Massachusetts	512	1.6	942	1.9	973	1.9	430	84.0
Rhode Island	59	0.2	110	0.2	107	0.2	51	86.4
Connecticut	356	1.1	573	1.2	599	1.2	217	61.0
Middle Atlantic	3,551	10.8	5,382	11.1	5,542	11.0	1,831	51.6
New York	1,582	4.8	2,336	4.8	2,396	4.8	754	47.7
New Jersey	744	2.3	1,159	2.4	1,174	2.3	415	55.8
Pennsylvania	1,225	3.7	1,887	3.9	1,972	3.9	662	54.0
East North Central	5,982	18.3	8,077	16.6	8,278	16.5	2,095	35.0
Ohio	1,397	4.3	1,876	3.9	1,905	3.8	479	34.3
Indiana	922	2.8	1,148	2.4	1,160	2.3	226	24.5
Illinois	1,482	4.5	1,964	4.0	2,023	4.0	482	32.5
Michigan	1,293	4.0	1,663	3.4	1,704	3.4	370	28.6
Wisconsin	888	2.7	1,426	2.9	1,486	3.0	538	60.6
West North Central	4,345	13.3	5,535	11.4	5,719	11.4	1,190	27.4
Minnesota	871	2.7	1,231	2.5	1,274	2.5	360	41.3
Iowa	1,121	3.4	1,203	2.5	1,238	2.5	82	7.3
Missouri	907	2.8	1,197	2.5	1,234	2.5	290	32.0
North Dakota	125	0.4	135	0.3	144	0.3	10	8.0
South Dakota	204	0.6	248	0.5	251	0.5	44	21.6
Nebraska	448	1.4	586	1.2	613	1.2	138	30.8
Kansas	669	2.0	935	1.9	965	1.9	266	39.8
South Atlantic	4,784	14.6	8,439	17.3	8,751	17.4	3,655	76.4
Delaware	80	0.2	109	0.2	128	0.3	29	36.3
Maryland	763	2.3	1,242	2.6	1,276	2.5	479	62.8
Virginia	719	2.2	1,353	2.8	1,408	2.8	634	88.2
District of Columbia	72	0.2	79	0.2	74	0.1	7	9.7
West Virginia	133	0.4	201	0.4	198	0.4	68	51.1
North Carolina	649	2.0	1,352	2.8	1,417	2.8	703	108.3
South Carolina	255	0.8	442	0.9	483	0.9	187	73.3
Georgia	749	2.3	1,227	2.5	1,279	2.5	478	63.8
Florida	1,364	4.2	2,434	5.0	2,508	5.0	1,070	78.4
East South Central	1,905	5.8	2,936	6.0	3,012	6.0	1,031	54.1
Kentucky	501	1.5	776	1.6	794	1.6	275	54.9
Tennessee	561	1.7	904	1.9	917	1.8	343	61.1
Alabama	538	1.6	837	1.7	874	1.7	299	55.6
Mississippi	305	0.9	419	0.9	427	0.9	114	37.4
West South Central	3,745	11.4	5,523	11.3	5,685	11.3	1,778	47.5
Arkansas	304	0.9	455	0.9	460	0.9	151	49.7
Louisiana	516	1.6	745	1.5	762	1.5	229	44.4
Oklahoma	623	1.9	892	1.8	895	1.8	269	43.2
Texas	2,302	7.0	3,431	7.1	3,548	7.1	1,129	49.0
Mountain	2,389	7.3	3,487	7.2	3,592	7.2	1,098	46.0
Montana	241	0.7	295	0.6	292	0.6	54	22.4
Idaho	259	0.8	325	0.7	329	0.7	66	25.5
Wyoming	128	0.4	158	0.3	166	0.3	30	23.4
Colorado	840	2.6	1,144	2.4	1,196	2.4	304	36.2
New Mexico	203	0.6	354	0.7	362	0.7	151	74.4
Arizona	424	1.3	706	1.5	731	1.5	282	66.5
Utah	158	0.5	241	0.5	253	0.5	83	52.5
Nevada	136	0.4	264	0.5	263	0.5	128	94.1
Pacific	4,524	13.8	6,737	13.8	6,977	13.9	2,213	48.9
Washington	826	2.5	1,163	2.4	1,230	2.5	337	40.8
Oregon	472	1.4	707	1.5	739	1.5	235	49.8
California	3,048	9.3	4,588	9.4	4,710	9.4	1,540	50.5
Alaska	77	0.2	124	0.3	133	0.3	47	61.0
Hawaii	101	0.3	155	0.3	165	0.3	54	53.5
Possessions	176	0.6	231	0.5	239	0.5	55	31.3
Puerto Rico	57	0.2	104	0.2	109	0.2	47	82.5
Other Possessions	119	0.4	127	0.3	130	0.3	8	6.7

Table 2—Veterinarians by primary employment, 1980, 1990, 1991

Primary employment	1980		1990		1991		Change 1980 to 1990	
	No.	Percentage	No.	Percentage	No.	Percentage	No.	Percentage
Total	32,268	100.0	45,755	100.0	46,814	100.0	13,487	41.8
Private clinical	25,499	100.0	36,828	100.0	37,615	100.0	11,329	44.4
Large animal exclusive	1,177	4.6	1,657	4.5	1,698	4.5	480	40.8
Large animal predominant	4,424	17.3	4,271	11.6	4,199	11.2	(153)	−3.5
Mixed animal	2,582	10.1	3,211	8.7	3,159	8.4	629	24.4
Small animal predominant	4,148	16.3	5,087	13.8	5,148	13.7	939	22.6
Small animal exclusive	11,724	46.0	19,921	54.1	20,614	54.8	8,197	69.9
Equine exclusive	1,032	4.0	1,641	4.5	1,634	4.3	609	59.0
Other	412	1.6	1,040	2.8	1,163	3.1	628	152.4
Public and corporate	6,769	100.0	8,927	100.0	9,199	100.0	2,158	31.9
College or university	2,849	42.1	4,393	49.2	4,438	48.2	1,544	54.2
Federal government	1,133	16.7	1,137	12.7	1,201	13.1	4	0.4
State or local government	635	9.8	704	7.9	717	7.8	39	5.9
Uniformed services	614	9.1	533	6.0	533	5.8	(81)	−13.2
Industry	868	12.8	1,238	13.8	1,310	14.2	368	42.4
Other	640	9.5	924	10.4	1,000	10.9	284	44.4

from 1980 to 1990. For the same period, the South Atlantic and New England regions had growth rates of 76.4 and 74%, respectively. As a result, South Atlantic replaced East North Central as the region with the most veterinarians.

North Carolina had the highest growth rate (108.3%) from 1980 to 1990. Iowa and North Dakota increased by 8.0% or less over the 10-year period. California had the largest population of veterinarians, with approximately 10% of the total in the nation. More than 26% of veterinarians were located in California, Texas, Florida, and New York combined.

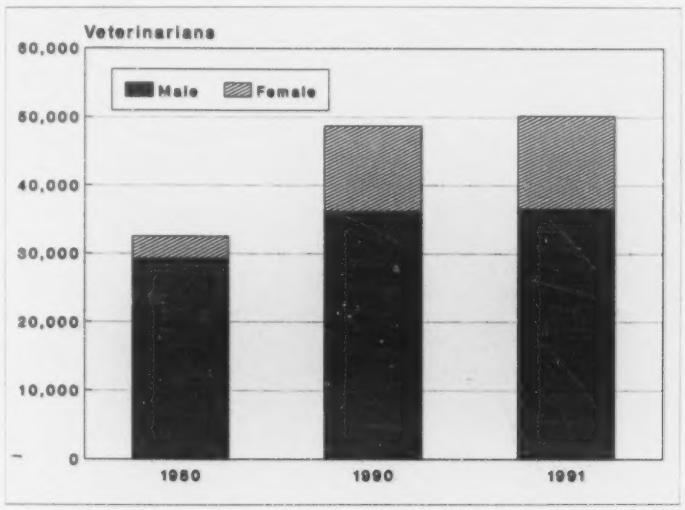

Figure 2—Veterinarians by gender, 1980, 1990, 1991.

Gender

From 1980 to 1990, more females than males entered veterinary medicine. The number of female veterinarians increased 288%, from 3,212 in 1980 to 12,462 in 1990, while male veterinarians increased only 24%, from 29,288 in 1980 to 36,204 in 1990 (Fig 2).

In 1980, approximately 90% of veterinarians were male, and 10% were female. In 1990, nearly 26% of veterinarians were female, and 74% were male. That is, in just over 10 years, the proportion of females increased from 1 of 10 to 1 of 4 veterinarians.

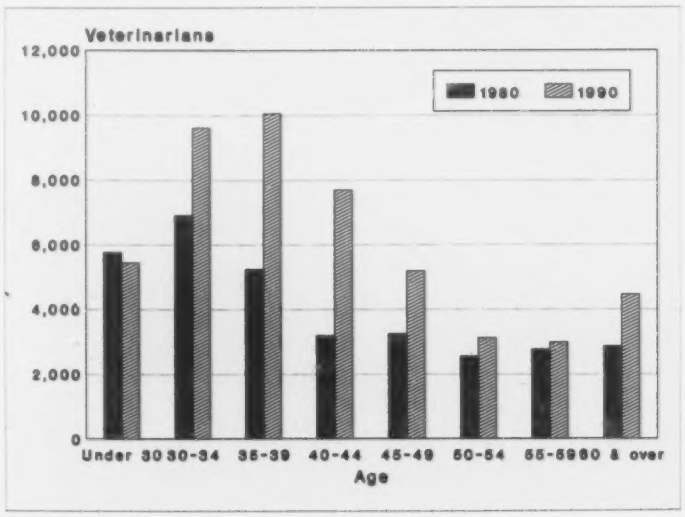

Figure 3—Veterinarians by age, 1980, 1990.

Age

The median age of active veterinarians was 39 in 1990, compared with 38 in 1980. This means that one half of the active veterinarians were younger than 39 years old, and one half were older. With the exception of the under-30 age group, the number of active veterinarians increased among age groups from 1980 to 1990 (Fig 3).

Primary Employment

In 1990, 80% of veterinarians were engaged in private clinical practice as a practice owner or as an associate of a private practice (Table 2). Twenty percent of veterinarians worked in public or corporate employment. This compared with 79% in private clinical practice and 21% in public and corporate employment in 1980.

Nearly 20,000 veterinarians were in small animal exclusive practice in 1990, up nearly 70% from 1980 (Fig 4). The number of equine practitioners increased by 59% over the 10-year period. While the number of large animal exclusive practitioners increased at least 40%, the population of mixed animal and small animal predominant practitioners grew slowly, in the 22 to 26% range. The number of large animal predominant practitioners declined from 1980 to 1990.

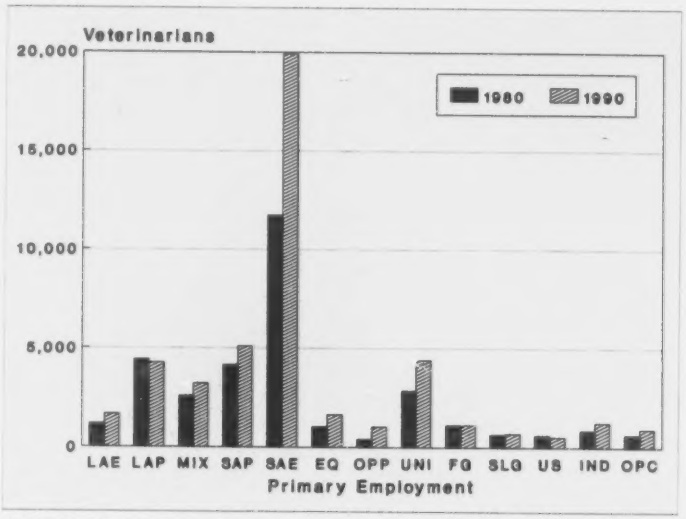

Figure 4—Veterinarians by primary employment, 1980, 1990. LAE = large animal exclusive; LAP = large animal predominant; MIX = mixed animal; SAP = small animal predominant; SAE = small animal exclusive; EQ = equine; OPP = other private practice; UNI = university; FG = federal government; SLG = state or local government; US = uniformed services; IND = industry; OPC = other public and corporate.

In public or corporate employment, college/university and industry sectors showed solid growth of 54 and 42%, respectively. Employment in the federal government was stable, and employment in the uniformed services declined slightly from 1980 to 1990.